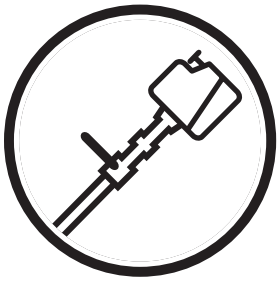
Operator's manual

123HD60

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.



English

KEY TO SYMBOLS

Symbols

WARNING! Incorrect or careless use of a hedge trimmer can turn it into a dangerous tool that can cause serious or even fatal injury. It is extremely important that you read and understand the contents of this operator's manual.

Please read the operator's manual carefully and make sure you understand the instructions before using the machine.

Always wear:

- Approved hearing protection
- Approved eye protection

This product is in accordance with applicable EC directives.

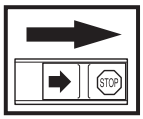
Always wear approved protective gloves.

Wear sturdy, non-slip boots or shoes.

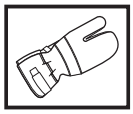
Noise emission to the environment according to the European Community's Directive. The machine's emission is specified in chapter Technical data and on label.

Other symbols/decals on the machine refer to special certification requirements for certain markets.

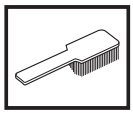
Switch off the engine by moving the stop switch to the STOP position before carrying out any checks or maintenance.



Always wear approved protective gloves.



Regular cleaning is required.



Visual check.

Protective goggles or a visor must be worn.

CONTENTS

Contents

KEY TO SYMBOLS
Symbols 2
CONTENTS
Contents 3
Note the following before starting: 3
INTRODUCTION
Dear Customer, ... 4
WHAT IS WHAT?
What is what? 5
GENERAL SAFETY PRECAUTIONS
Important 6
Personal protective equipment 6
Machine's safety equipment 7
FUEL HANDLING
Fuel safety 10
Fuel 10
Fuelling 11
STARTING AND STOPPING
Check before starting 12
Starting and stopping 12
WORKING TECHNIQUES
General working instructions 13
MAINTENANCE
Carburettor 15
Muffler 15
Cooling system 16
Spark plug 16
Air filter 16
Gear housing 17
Cleaning and lubrication 17
Maintenance schedule 18
TECHNICAL DATA
Technical data 19
EC-declaration of conformity (Applies to Europe only) . 19

Note the following before starting:

Please read the operator's manual carefully.

Long-term exposure to noise can result in permanent hearing impairment. So always use approved hearing protection.

WARNING! Under no circumstances may the design of the machine be modified without the permission of the manufacturer. Always use genuine accessories. Non-authorized modifications and/or accessories can result in serious personal injury or the death of the operator or others.

WARNING! Incorrect or careless use of a hedge trimmer can turn it into a dangerous tool that can cause serious or even fatal injury. It is extremely important that you read and understand the contents of this operator's manual.

INTRODUCTION

Dear Customer,

Congratulations on your choice to buy a Husqvarna product! Husqvarna is based on a tradition that dates back to 1689, when the Swedish King Charles XI ordered the construction of a factory on the banks of the Husqvarna River, for production of muskets. The location was logical, since water power was harnessed from the Huskvarna River to create the water-powered plant. During the more than 300 years of beeing, the Husqvarna factory has produced a lot of different products, from wood stoves to modern kitchen appliances, sewing machines, bicycles, motorcycles etc. In 1956, the first motor driven lawn mowers appeared, followed by chain saws in 1959, and it is within this area Husqvarna is working today.

Today Husqvarna is one of the leading manufacturers in the world of forest and garden products, with quality as our highest priority. The business concept is to develop, manufacture and market motor driven products for forestry and gardening as well as for building and construction industry. Husqvarna′s aim is also to be in the front edge according to ergonomics, usability, security and environmental protection. That is the reason why we have developed many different features to provide our products within these areas.

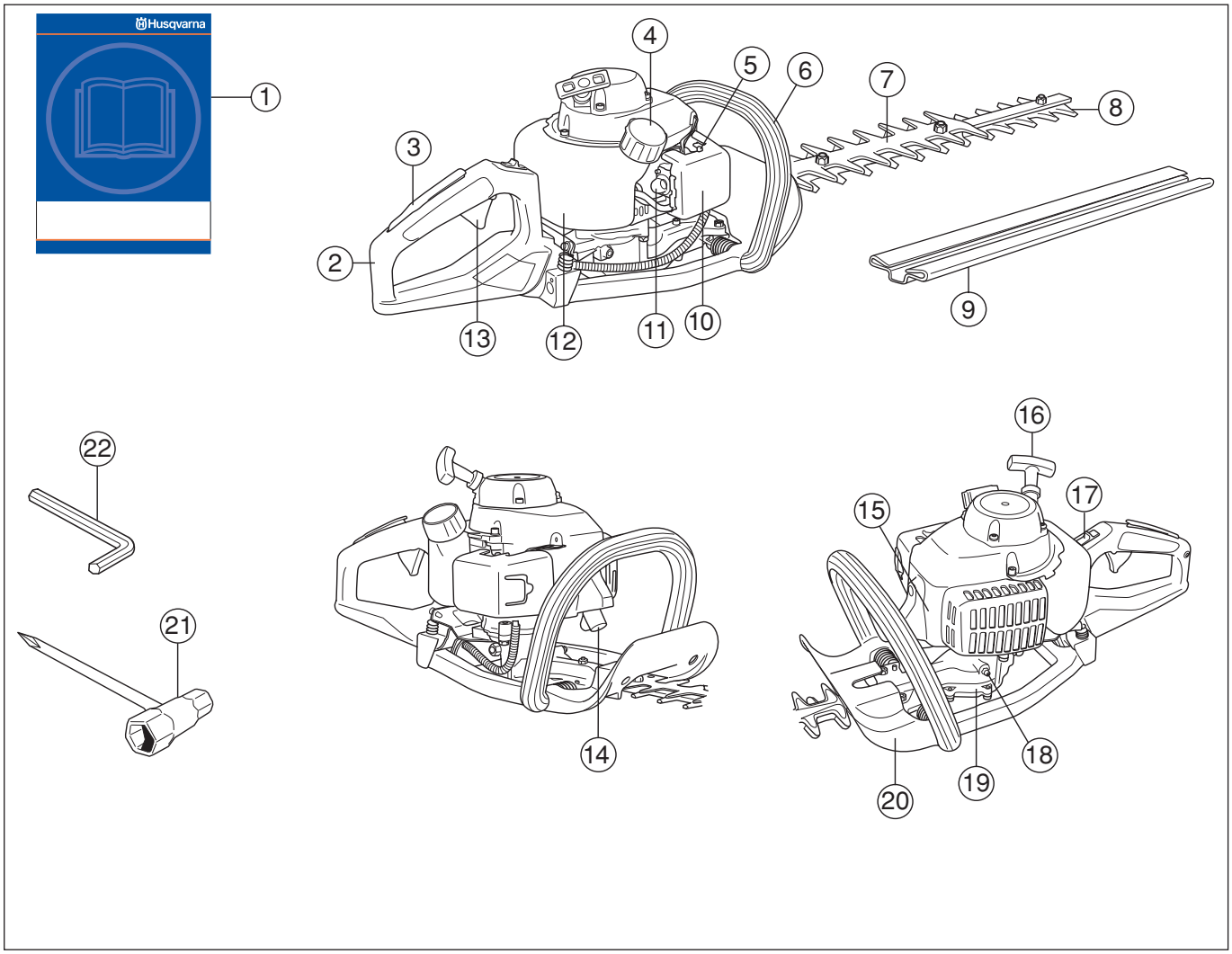
We are convinced that you will appreciate with great satisfaction the quality and performance of our product for a very long time to come. The purchase of one of our products gives you access to professional help with repairs and service whenever this may be necessary. If the retailer who sells your machine is not one of our authorised dealers, ask for the address of your nearest service workshop.

It is our wish that you will be satisfied with your product and that it will be your companion for a long time. Think of this operator′s manual as a valuable document. By following its′ content (using, service, maintenance etc) the life span and the second-hand value of the machine can be extended. If you will sell this machine, make sure that the buyer will get the operator′s manual.

Thank you for using a Husqvarna product.

Husqvarna AB has a policy of continuous product development and therefore reserves the right to modify the design and appearance of products without prior notice.

WHAT IS WHAT?



What is what?

1 Operator's manual
2 Handle
3 Throttle lock
4 Fuel cap
5 Choke control
6 Front handle
7 Blade guard
8 Blades
9 Transport guard
10 Air filter cover.
11 Air purge
12 Fuel tank
13 Throttle control
14 Spark plug cap and spark plug
15 Cylinder cover
16 Starter handle
17 Stop switch
18 Grease filler cap, bevel gear
19 Gear housing
20 Hand guard
21 Combination spanner
22 Allen key

GENERAL SAFETY PRECAUTIONS

Important

IMPORTANT!

The machine is only designed for cutting branches and twigs.

Never use a machine that has been modified in any way from its original specification.

Never use the machine if you are tired, if you have drunk alcohol, or if you are taking medication that could affect your vision, your judgement or your co-ordination.

Wear personal protective equipment. See instructions under the heading Personal protective equipment.

Never use the machine in extreme weather conditions such as severe cold, very hot and/or humid climates.

Never use a machine that is faulty. Carry out the checks, maintenance and service instructions described in this manual. Some maintenance and service measures must be carried out by trained and qualified specialists. See instructions under the heading Maintenance.

All covers and guards must be fitted before starting. Ensure that the spark plug cap and ignition lead are undamaged to avoid the risk of electric shock.

WARNING! Running an engine in a confined or badly ventilated area can result in death due to asphyxiation or carbon monoxide poisoning.

WARNING! Faulty blades can increase the risk of accidents.

Personal protective equipment

IMPORTANT!

Incorrect or careless use of a hedge trimmer can turn it into a dangerous tool that can cause serious or even fatal injury. It is extremely important that you read and understand the contents of this operator's manual.

You must use approved personal protective equipment whenever you use the machine. Personal protective equipment cannot eliminate the risk of injury but it will reduce the degree of injury if an accident does happen. Ask your dealer for help in choosing the right equipment.

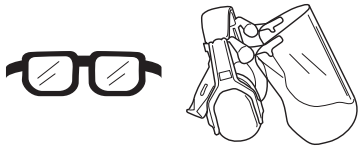
WARNING! Listen out for warning signals or shouts when you are wearing hearing protection. Always remove your hearing protection as soon as the engine stops.

HEARING PROTECTION

Wear hearing protection that provides adequate noise reduction.

EYE PROTECTION

Always wear approved eye protection. If you use a visor then you must also wear approved protective goggles. Approved protective goggles must comply with standard ANSI Z87.1 in the USA or EN 166 in EU countries.



GLOVES

Gloves should be worn when necessary, e.g., when fitting cutting attachments.

BOOTS

Wear sturdy, non-slip boots or shoes.

CLOTHING

Wear clothes made of a strong fabric and avoid loose clothing that can catch on twigs and branches. Always wear heavy, long pants. Do not wear jewellery, shorts sandals or go barefoot. Secure hair so it is above shoulder level.

FIRST AID KIT

Always have a first aid kit nearby.

Machine's safety equipment

This section describes the machine's safety equipment, its purpose, and how checks and maintenance should be carried out to ensure that it operates correctly. See the "What is what?" section to locate where this equipment is positioned on your machine.

The life span of the machine can be reduced and the risk of accidents can increase if machine maintenance is not carried out correctly and if service and/or repairs are not carried out professionally. If you need further information please contact your nearest service workshop.

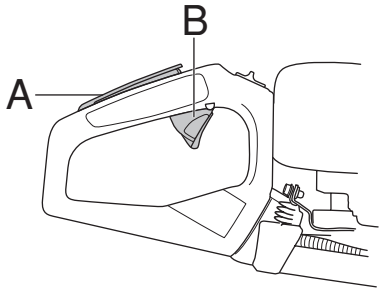
IMPORTANT!

All servicing and repair work on the machine requires special training. This is especially true of the machine's safety equipment. If your machine fails any of the checks described below you must contact your service agent. When you buy any of our products we guarantee the availability of professional repairs and service. If the retailer who sells your machine is not a servicing dealer, ask him for the address of your nearest service agent.

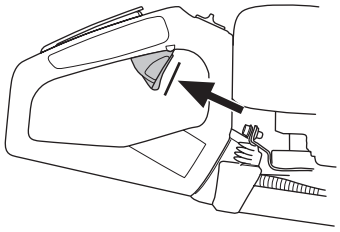
WARNING! Never use a machine with faulty safety equipment. The machine's safety equipment must be checked and maintained as described in this section. If your machine fails any of these checks contact your service agent to get it repaired.

Throttle lock

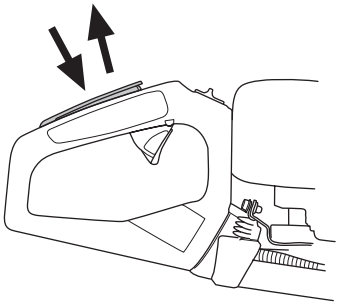
The throttle lock is designed to prevent accidental operation of the throttle control. When you press the lock (A) (i.e. when you grasp the handle) it releases the throttle control (B). When you release the handle the throttle control and the throttle lock both move back to their original positions. This movement is controlled by two independent return springs. This arrangement means that the throttle control is automatically locked at the idle setting.



Make sure the throttle control is locked at the idle setting when the throttle lock is released.



Press the throttle lock and make sure it returns to its original position when you release it.

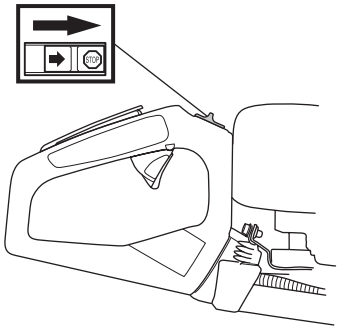


Check that the throttle control and throttle lock move freely and that the return springs work properly.

See instructions under the heading Start. Start the hedge trimmer and apply full throttle. Release the throttle trigger and check that the blades stop and remain stationary. If the blades move when the throttle trigger is in the idle position then the carburettor idle setting must be adjusted. See instructions under the heading Maintenance.

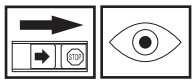
Stop switch

Use the stop switch to switch off the engine.

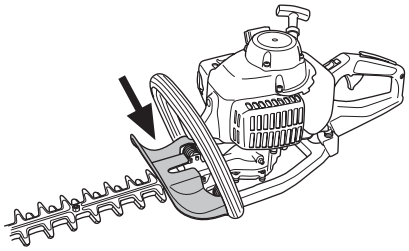


Start the engine and make sure the engine stops when you move the stop switch to the stop setting.

Hand guard



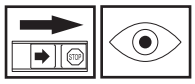
The hand guard prevents hands from coming into contact with the moving blades, for example, if the operator loses grip on the front handle.



Check that the hand guard is fitted correctly.

Check that the hand guard is undamaged.

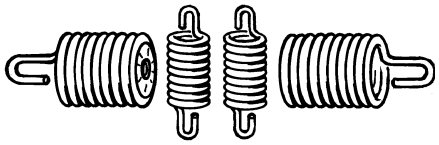
Vibration damping system



Your machine is equipped with a vibration damping system that is designed to minimize vibration and make operation easier.

The machine's vibration damping system reduces the transfer of vibration between the engine unit/cutting equipment and the machine's handle unit.

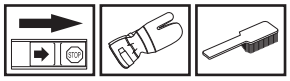
The engine body including the blades is suspended on the handlebar system via a four springs.



Regularly check the vibration damping units for cracks or deformation. Check that the vibration damping element is undamaged and securely attached.

WARNING! Overexposure to vibration can lead to circulatory damage or nerve damage in people who have impaired circulation. Contact your doctor if you experience symptoms of overexposure to vibration. Such symptoms include numbness, loss of feeling, tingling, pricking, pain, loss of strength, changes in skin colour or condition. These symptoms normally appear in the fingers, hands or wrists. The risk increases at low temperatures.

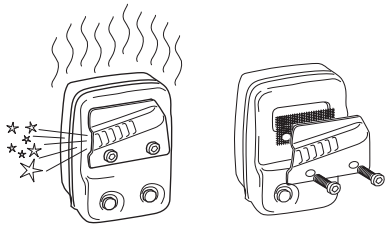
Muffler



The muffler is designed to keep noise levels to a minimum and to direct exhaust fumes away from the user.

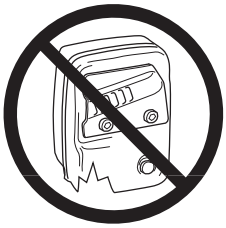
A muffler fitted with a catalytic converter is also designed to reduce harmful exhaust gases.

In countries that have a warm and dry climate there is a significant risk of fire. We therefore fit certain mufflers with a spark arrestor mesh. Check whether the muffler on your machine is fitted with this kind of mesh.

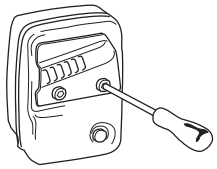


For mufflers it is very important that you follow the instructions on checking, maintaining and servicing your machine.

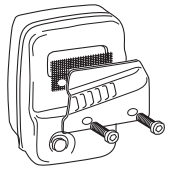
Never use a machine that has a faulty muffler.



Regularly check that the muffler is securely attached to the machine.



If the muffler on your machine is fitted with a spark arrestor mesh this must be cleaned regularly. A blocked mesh will cause the engine to overheat and may lead to serious damage.



WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!

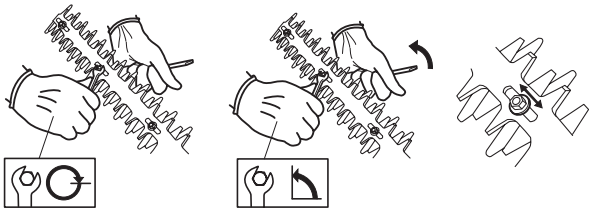
WARNING! The inside of the muffler contain chemicals that may be carcinogenic. Avoid contact with these elements in the event of a damaged muffler.

WARNING! Bear in mind that:

The exhaust fumes from the engine are hot and may contain sparks which can start a fire. Never start the machine indoors or near combustible material!

Blades

To ensure good cutting results it is important that the contact pressure between the blades is correct. The contact pressure is adjusted by turning the screws on the underside of the bar clockwise as far as they will go. Then turn the screws anticlockwise a 1/4 turn. Lock the screws using the locking nut on the top of the bar. Check that the screws are loose enough to allow the washers under the screw heads to slide sideways.



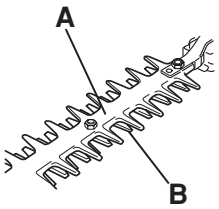
When the blades are correctly adjusted the play between the blades should be 0,2–0,4 mm, measured at the screws.

The edges of the blades are too hard to be filed. Dull blades should be sharpened using a grinder.

Replace the blades if they are bent or damaged.

Blade guard

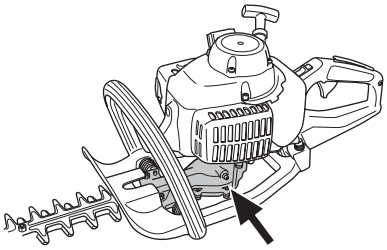
The blade guard (A) is intended to protect against any part of the body coming into contact with the blades (B).



Check that the blade guard is not damaged or distorted. Replace the blade guard if it is bent or damaged.

Gear housing

The gear housing gets hot when the machine has been in use. To avoid burning yourself do not touch the gear housing.



FUEL HANDLING

Fuel safety

Never start the machine:

1 If you have spilt fuel on it. Wipe off the spillage and allow remaining fuel to evaporate.

2 If you have spilt fuel on yourself or your clothes, change your clothes. Wash any part of your body that has come in contact with fuel. Use soap and water.

3 If the machine is leaking fuel. Check regularly for leaks from the fuel cap and fuel lines.

Transport and storage

- Store and transport the machine and fuel so that there is no risk of any leakage or fumes coming into contact with sparks or naked flames, for example, from electrical machinery, electric motors, electrical relays/switches or boilers.
- When storing and transporting fuel always use approved containers intended for this purpose.
- When storing the machine for long periods the fuel tank must be emptied. Contact your local petrol station to find out where to dispose of excess fuel.
- Ensure the machine is cleaned and that a complete service is carried out before long-term storage.
- The transport guard must always be fitted to the cutting attachment when the machine is being transported or in storage.

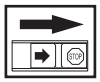
WARNING! Take care when handling fuel. Bear in mind the risk of fire, explosion and inhaling fumes.

Fuel

CAUTION! The machine is equipped with a two-stroke engine and must always been run using a mixture of petrol and two-stroke engine oil. It is important to accurately measure the amount of oil to be mixed to ensure that the correct mixture is obtained. When mixing small amounts of fuel, even small inaccuracies can drastically affect the ratio of the mixture.

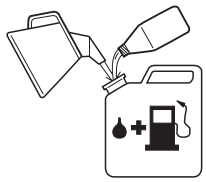
WARNING! Fuel and fuel fumes are highly inflammable and can cause serious injury when inhaled or allowed to come in contact with the skin. For this reason observe caution when handling fuel and make sure there is adequate ventilation.

Petrol



CAUTION! Always use a quality petrol/oil mixture at least 90 octane (RON). If your machine is equipped with a catalytic converter (see chapter on Technical data) always use a good quality unleaded petrol/oil mixture. Leaded petrol will destroy the catalytic converter.

Use low-emission petrol, also known as alkylate petrol, if it is available.



- The lowest octane recommended is 90 (RON). If you run the engine on a lower octane grade than 90 so-called knocking can occur. This gives rise to a high engine temperature, which can result in serious engine damage.
- When working at continuous high revs a higher octane rating is recommended.

Two-stroke oil

- For best results and performance use HUSQVARNA two-stroke engine oil, which is specially formulated for our air-cooled two-stroke engines.
- Never use two-stroke oil intended for water-cooled engines, sometimes referred to as outboard oil (rated TCW).
- Never use oil intended for four-stroke engines.
- A poor oil quality and/or too high oil/fuel ratio may jeopardise function and decrease the life time of catalytic converters.
- Mixing ratio

  1:50 (2%) with HUSQVARNA two-stroke oil.

  1:33 (3%) with oils class JASO FB or ISO EGB formulated for air-cooled, two-stroke engines.

Petrol, litre	Two-stroke oil, litre	
	2% (1:50)	3% (1:33)
5	0,10	0,15
10	0,20	0,30
15	0,30	0,45
20	0,40	0,60

FUEL HANDLING

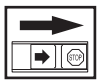
Mixing

- Always mix the petrol and oil in a clean container intended for fuel.
- Always start by filling half the amount of the petrol to be used. Then add the entire amount of oil. Mix (shake) the fuel mixture. Add the remaining amount of petrol.
- Mix (shake) the fuel mixture thoroughly before filling the machine's fuel tank.

- Do not mix more than one month's supply of fuel at a time.
- If the machine is not used for some time the fuel tank should be emptied and cleaned.

WARNING! The catalytic converter muffler gets very hot during and after use. This also applies during idling. Be aware of the fire hazard, especially when working near flammable substances and/or vapours.

Fuelling



WARNING! Taking the following precautions, will lessen the risk of fire:

Do not smoke or place hot objects near fuel.

Always shut off the engine before refuelling.

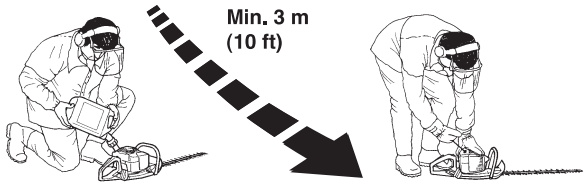
Always stop the engine and let it cool for a few minutes before refuelling.

When refuelling, open the fuel cap slowly so that any excess pressure is released gently.

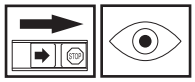
Tighten the fuel cap carefully after refuelling.

Always move the machine away from the refuelling area before starting.

- Always use a fuel container with an anti-spill valve.
- Clean the area around the fuel cap. Contamination in the tank can cause operating problems.
- Ensure that the fuel is well mixed by shaking the container before filling the tank.



Check before starting



- Inspect the working area. Remove any objects that could be thrown out.
- Check the cutting attachment. Never use blades that are dull, cracked or damaged.
- Check that the machine is in perfect working order. Check that all nuts and screws are tight.
- Make sure the gear housing is lubricated correctly. See instructions under the heading Gear housing.
- Check that the cutting attachment always stops when the engine is idling.
- Only use the machine for the purpose it was intended for.
- Make sure that the handle and safety features are in good working order. Never use a machine that lacks a part or has been modified outside its specifications.
- All covers must be correctly fitted and undamaged before you start the machine.

Starting and stopping

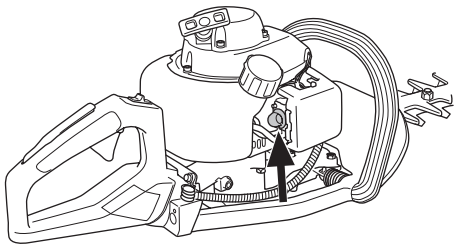
WARNING! The complete clutch cover and gear housing must be fitted before the machine is started, otherwise the clutch may come loose and cause personal injury.

Always move the machine about 3 metres from the refuelling position before starting. Place the machine on a firm surface. Remember that the blades may start to move when the engine is started. Make sure the blades cannot come into contact with any object. Make sure that no unauthorised persons are in the working area, otherwise there is a risk of serious personal injury. The safety distance is 15 metres.

Cold engine

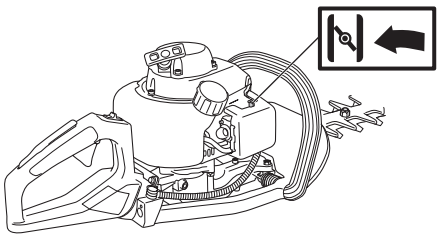
Primer bulb:

Press the air purge repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled.



Choke:

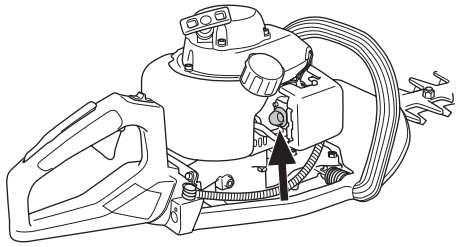
Set the choke control in the choke position.



Warm engine

Primer bulb:

Press the air purge repeatedly until fuel begins to fill the bulb. The bulb need not be completely filled.



Starting

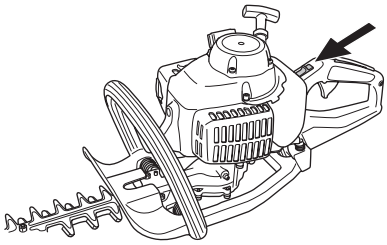
Hold the body of the machine on the ground using your left hand (CAUTION! Not with your foot!). Grip the starter handle, slowly pull out the cord with your right hand until you feel some resistance (the starter pawls grip), now quickly and powerfully pull the cord. **Never twist the starter cord around your hand.**

Push the choke control back to its original position as soon as the engine fires, and continue trying to start until the engine starts.

CAUTION! Do not pull the starter cord all the way out and do not let go of the starter handle when the cord is fully extended. This can damage the machine.

Stopping

The engine is switched off by moving the stop switch to the stop position.



WORKING TECHNIQUES

General working instructions

IMPORTANT!

This section takes up the basic safety precautions for working with a hedge trimmer.

If you encounter a situation where you are uncertain how to proceed you should ask an expert. Contact your dealer or your service workshop.

Avoid all usage which you consider to be beyond your capability.

WARNING! The machine can cause serious personal injury. Read the safety instructions carefully. Learn how to use the machine.

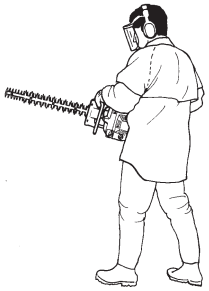
WARNING! Cutting tool. Do not touch the tool without first switching off the engine.

Safety instructions regarding the surroundings

- Never allow children to use the machine.
- Ensure that no-one comes closer than 15 m while you are working.
- Never allow anyone else to use the machine without first ensuring that they have understood the contents of the operator's manual.
- Never work from a ladder, stool or any other raised position that is not fully secured.

Safety instructions while working

- Always ensure you have a safe and stable working position.
- Always use both hands to hold the machine. Hold the machine in front of your body.



- Make sure that your hands and feet do not come near the cutting attachment when the engine is running.

- When the engine is switched off, keep your hands and feet away from the cutting attachment until it has stopped completely.
- Watch out for stumps of branches that can be thrown out during cutting.
- Do not cut too close to the ground. Stones and other objects can be thrown out.
- Check the working area for foreign objects such as electricity cables, insects and animals, etc, or other objects that could damage the cutting attachment, such as metal items.
- If any foreign object is hit or if vibrations occur stop the machine immediately. Disconnect the HT lead from the spark plug. Check that the machine is not damaged. Repair any damage.
- If anything jams in the blades while you are working, switch off the engine and wait until it has stopped completely before cleaning the blades. Disconnect the HT lead from the spark plug.

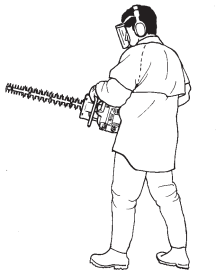
Safety instructions after completing work

- The transport guard should always be fitted to the cutting attachment when the machine is not in use.
- Make sure the cutting attachment has stopped before cleaning, carrying out repairs or an inspection. Disconnect the HT lead from the spark plug.
- Always wear heavy-duty gloves when repairing the cutting attachment. This is extremely sharp and can easily cause cuts.

- Store the machine out of reach of children.
- Use only original spare parts for repairs.

Basic working techniques

- Work with a swinging action from the bottom upwards when trimming sides.
- Adjust the throttle setting to suit the load.
- When trimming a hedge the engine should always face away from the hedge.
- Hold the machine as close to your body as possible to get the best balance.



- Make sure that the tip does not touch the ground.
- Do not rush the work, but work steadily until all the branches have been cut back cleanly.

Carburettor

Your Husqvarna product has been designed and manufactured to specifications that reduce harmful emissions. After the engine has used 8-10 tanks of fuel the engine will be run-in. To ensure that it continues to run at peak performance and to minimise harmful exhaust emissions after the running-in period, ask your dealer/service workshop (who will have a rev counter at their disposal) to adjust your carburettor.

WARNING! The complete clutch cover and gear housing must be fitted before the machine is started, otherwise the clutch may come loose and cause personal injury.

Function

- The carburettor governs the engine's speed via the throttle control. Air and fuel are mixed in the carburettor. The air/fuel mixture is adjustable. Correct adjustment is essential to get the best performance from the machine.
- Adjusting the carburettor means that the engine is adapted to local operating conditions, e.g. climate, altitude, petrol and the type of 2-stroke oil.

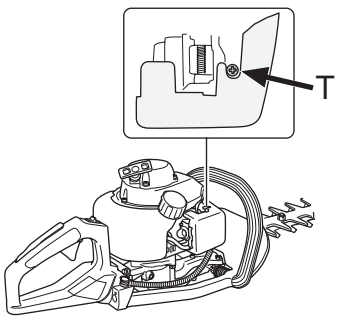
Adjusting the idle speed

The T-screw regulates the throttle setting at idle speed. If the T-screw is turned clockwise this gives a higher idle speed; turning it anti-clockwise gives a lower idle speed.

Before any adjustments are made, make sure that the air filter is clean and the air filter cover is fitted.

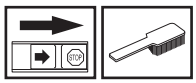
Adjust the idle speed with the idle adjustment screw T, if adjustment is necessary. First turn the idle adjustment screw T clockwise until the blades start to move. Then turn the idle adjustment screw T anticlockwise until the blades stop. The idle speed is correctly adjusted when the engine runs smoothly in every position. There should also be a clear margin to the speed at which the blades start to move.

The blades must also remain stationary when the choke control is in the start throttle position.



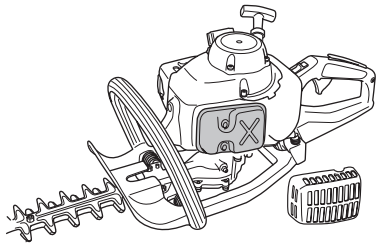
WARNING! If the idle speed cannot be adjusted so that the cutting attachment stops, contact your dealer/service workshop. Do not use the machine until it has been correctly adjusted or repaired.

Muffler



CAUTION! Some mufflers are fitted with a catalytic converter. See chapter on Technical data to see whether your machine is fitted with a catalytic converter.

The muffler is designed to reduce the noise level and to direct the exhaust gases away from the operator. The exhaust gases are hot and can contain sparks, which may cause fire if directed against dry and combustible material.



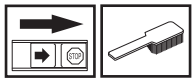
Some mufflers are equipped with a special spark arrestor mesh. If your machine has this type of muffler, you should clean the mesh at least once a week. This is best done with a wire brush.

On mufflers without a catalytic converter the mesh should be cleaned weekly, or replaced if necessary. On mufflers fitted with a catalytic converter the mesh should be checked, and if necessary cleaned, monthly. **If the mesh is damaged it should be replaced.** If the mesh is frequently blocked, this can be a sign that the performance of the catalytic converter is impaired. Contact your dealer to inspect the muffler. A blocked mesh will cause the machine to overheat and result in damage to the cylinder and piston. See also instructions under the heading Maintenance.

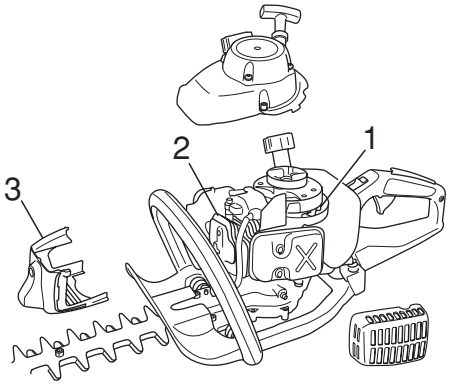
CAUTION! Never use a machine with a defective muffler.

WARNING! Mufflers fitted with catalytic converters get very hot during use and remain so for some time after stopping. This also applies at idle speed. Contact can result in burns to the skin. Remember the risk of fire!

Cooling system



To keep the working temperature as low as possible the machine is equipped with a cooling system.



The cooling system consists of:

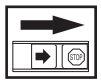
1 Fins on the flywheel.

2 Cooling fins on the cylinder.

3 Cylinder cover (directs cold air over the cylinder).

Clean the cooling system with a brush once a week, more often in demanding conditions. A dirty or blocked cooling system results in the machine overheating which causes damage to the piston and cylinder.

Spark plug

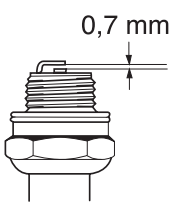


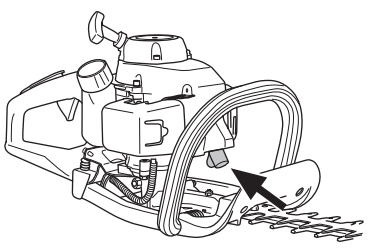
The spark plug condition is influenced by:

- Incorrect carburettor adjustment.
- An incorrect fuel mixture (too much or incorrect type of oil).
- A dirty air filter.

These factors cause deposits on the spark plug electrodes, which may result in operating problems and starting difficulties.

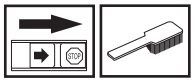
If the machine is low on power, difficult to start or runs poorly at idle speed: always check the spark plug first before taking any further action. If the spark plug is dirty, clean it and check that the electrode gap is 0.7 mm. The spark plug should be replaced after about a month in operation or earlier if necessary.





CAUTION! Always use the recommended spark plug type! Use of the wrong spark plug can damage the piston/cylinder. Check that the spark plug is fitted with a suppressor.

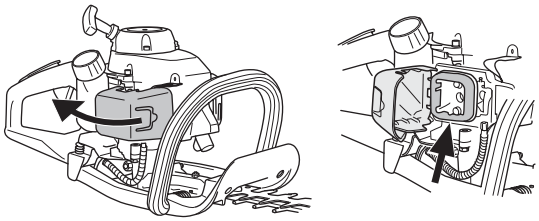
Air filter



The air filter must be regularly cleaned to remove dust and dirt in order to avoid:

- Carburettor malfunctions
- Starting problems
- Loss of engine power
- Unnecessary wear to engine parts.
- Excessive fuel consumption.

Clean the filter every 25 hours, or more regularly if conditions are exceptionally dusty.



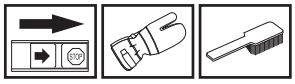
Cleaning the air filter

Remove the air filter cover and take out the filter. Wash it clean in warm, soapy water. Ensure that the filter is dry before refitting it.

An air filter that has been in use for a long time cannot be cleaned completely. The filter must therefore be replaced with a new one at regular intervals. **A damaged air filter must always be replaced.**

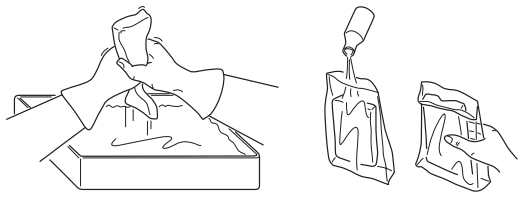
If the machine is used in dusty conditions the air filter should be soaked in oil. See instructions under the heading Oiling the air filter.

Oiling the air filter



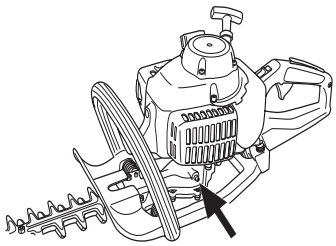
Always use HUSQVARNA filter oil, art. no. 531 00 92-48. The filter oil contains a solvent to make it spread evenly through the filter. You should therefore avoid skin contact.

Put the filter in a plastic bag and pour the filter oil over it. Knead the plastic bag to distribute the oil. Squeeze the excess oil out of the filter inside the plastic bag and pour off the excess before fitting the filter to the machine. Never use common engine oil. This would drain through the filter quite quickly and collect in the bottom.



Gear housing

There is a grease nipple on the gearbox. Use a grease gun to top up with grease. This should be carried out after approximately every 60 working hours. Use Husqvarna special grease, No. 503 98 96-01.



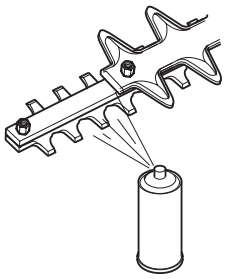
CAUTION! The gear housing must not be filled completely with grease. The grease expands as the machine heats up during operation. If the gear housing was completely filled with grease it could damage the seals and lead to leakage of grease.

The grease in the bevel gear does not normally need to be changed except if repairs are carried out.

Cleaning and lubrication

Clean any resin and plant residue from the blades using cleaning agent 531 00 75-13 (UL22) before and after using the machine.

Lubricate the blade bars with special grease, part no. 531 00 75-12 (UL 21) before long periods of storage.



Maintenance schedule

The following is a list of the maintenance that must be performed on the machine. Most of the items are described in the Maintenance section. The user must only carry out the maintenance and service work described in this Operator's Manual. More extensive work must be carried out by an authorised service workshop.

Maintenance	Daily maintenance	Weekly maintenance	Monthly maintenance
Clean the outside of the machine.	X		
Make sure the throttle trigger lock and the throttle function correctly from a safety point of view.	X		
Check that the stop switch works correctly.	X		
Check that the blades do not move when the engine is idling or when the choke is in the start throttle position.	X		
Check that the tines are undamaged and show no signs of cracking or other damage. Replace the tines if necessary.	X		
Check that the blade guard is not damaged or distorted. Replace the blade guard if it is bent or damaged.	X		
Clean the air filter. Replace if necessary.	X		
Check that the hand guard is not damaged. Replace the guard if damaged.	X		
Check that nuts and screws are tight.	X		
Check that there are no fuel leaks from the engine, tank or fuel lines.	X		
Check the starter and starter cord.		X	
Check that the vibration damping elements are not damaged.		X	
Clean the outside of the spark plug. Remove it and check the electrode gap. Adjust the gap to 0.5 mm or replace the spark plug. Check that the spark plug is fitted with a suppressor.		X	
Clean the machines cooling system.		X	
Clean or replace the spark arrestor mesh on the muffler (only applies to mufflers without a catalytic converter).		X	
Clean the outside of the carburettor and the space around it.		X	
Fill the gear housing with grease. This should be carried out approximately every 60 working hours.		X	
Check that the screws that hold the blades together are correctly tightened.		X	
Clean the fuel tank.			X
Check the fuel filter from contamination and the fuel hose from cracks or other defects. Replace if necessary.			X
Check all cables and connections.			X
Check the clutch, clutch springs and the clutch drum for wear. Replace if necessary by an autorized service workshop.			X
Replace the spark plug. Check that the spark plug is fitted with a suppressor.			X
Check and clean the spark arrestor mesh on the muffler (only applies to mufflers fitted with a catalytic converter).			X
Clean dirt, leaves and surplus lubricant, etc from the muffler and engine.			X

Technical data

Technical data	**123HD60**
Engine	
Cylinder displacement, cm^3	22,5
Cylinder bore, mm	32,0
Stroke, mm	28,0
Idle speed, rpm	3000
Recommended max. speed, rpm	12000
Max. engine output, acc. to ISO 8893, kW/ rpm	0,6/7000
Catalytic converter muffler	No
Speed-regulated ignition system	No
Ignition system	
Manufacturer/type of ignition system	Ikeda
Spark plug	NGK BPMR 6Y
Electrode gap, mm	0,7
Fuel and lubrication system	
Manufacturer/type of carburettor	Walbro
Fuel tank capacity, litre	0,5
Weight	
Weight without fuel, kg	5,1
Noise emissions	
(see note 1)	
Sound power level, measured dB(A)	105
Sound power level, guaranteed L_{WA} dB(A)	106
Sound levels	
(see note 2)	
Equivalent noise pressure level at the operator's ear, measured according to EN/ISO 11806 and ISO 7917, dB(A), min./max.:	82/86
Vibration levels	
Vibration levels at handles, measured according to EN/ISO 11806 and ISO 7916, m/s^2	
Idle speed, rear/front handles:	2,1/1,6
Max. speed, rear/front handles:	8,2/6,0
Blades	
Type	Double sided
Length, mm	550
Blade speed, cuts/min	3765

Note 1: Noise emissions in the environment measured as sound power (L_{WA}) in conformity with EC directive 2000/14/EC.

Note 2: Equivalent sound pressure level is calculated as the time-weighted energy total for sound pressure levels under various working conditions with the following time distribution: 1/2 idling and 1/2 max speed.

EC-declaration of conformity (Applies to Europe only)

Maruyama MGF, Inc 4-15 Uchikanda 3-Chome Chiyoda-Ku Tokyo 101-0047, Japan, declare under sole responsibility that the hedge trimmers **Husqvarna 123HD60** from 2005's serial numbers and onwards (the year is clearly stated in plain text on the type plate with subsequent serial number), are in conformity with the standards or or other normative documents following the provisions in the COUNCIL'S DIRECTIVES:

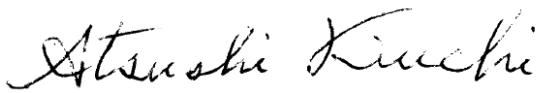
of June 22, 1998 "relating to machinery" **98/37/EC**, annex IIA.

of May 3, 1989 "relating to electromagnetic compatibility" **89/336/EEC**, and applicable supplements.

of May 8, 2000 "relating to the noise emissions in the environment" **2000/14/EC**.

For information relating to noise emissions, see the chapter Technical data. The following standards have been applied: **EN292-2, CISPR 12:1997, EN774**

Tokyo, 10 November 2005



Atsushi Kiuchi, Managing Director

1150168-26

2005-11-10